



DATE 7/26/82

SSC Service Bulletin

no. 82-263

TO: ALL REGENCY COMMUNICATIONS PROFESSIONAL SALES AND SERVICE CENTERS
ALL REGENCY COMMUNICATIONS PROFESSIONAL SALES REPRESENTATIVES

MODELS AFFECTED: XLU152, XLU1515

SYMPTOM: INFERIOR TX HUM AND NOISE

SOLUTION:

Replace IC605 and IC606 (CA3130) with Regency Part Number 3130-3167-907 (μ A741). At the same time, remove C606, C608, and R610 which are now unnecessary.

Radios manufactured after August 1982 will have this change.

Remove pages 13,14,15, and 16 from your XLU1515 Service Manual and pages 9,10,11, and 12 from your XLU152 Service Manual and replace them with the attached pages. (Parts List for the XLU152 were attached to Service Bulletin 81-202.)

TECHNICAL SERVICE DEPARTMENT

REGENCY COMMUNICATIONS, INC.

<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>ZONE</u>
<u>SYNTHESIZER</u>			
<u>RESISTORS</u> (All resistors are $\frac{1}{4}$ W 5% unless otherwise noted.)			
R600	10 ohm	4704-0100-032	E-6
R601	27 ohm, 10%, comp.	4700-0270-042	E-6
R602	150 ohm	4704-0151-032	D-6
R603	12K	4704-0123-032	D-5
R604	18 ohm	4704-0180-032	E-6
R605	39 ohm	4704-0390-032	D-6
R606	39 ohm	4704-0390-032	D-6
R607	27K	4704-0273-032	E-5
R608	470 ohm	4704-0471-032	D-5
R609	27 ohm, 10%, comp.	4700-0270-042	D-6
R610	not used		
R611	390 ohm	4704-0391-032	C-9
R612	1.2K	4704-0122-032	D-9
R613	2.7 ohm	4704-0279-032	C-9
R614	56K	4704-0563-032	C-7
R615	100K	4704-0104-032	C-7
R616	15K	4704-0153-032	B-7
R617	47K	4704-0473-032	C-7
R618	68K	4704-0683-032	C-7
R619	68K	4704-0683-032	C-7
R620	100K	4704-0104-032	C-6
R621	27K	4704-0273-032	B-7
R622	330 ohm	4704-0331-032	B-6
R623	22K	4704-0223-032	E-8
R624	22K	4704-0223-032	E-8
R625	27K	4704-0273-032	B-10
R626	4.7K	4704-0472-032	C-9
R627	8.2K	4704-0822-032	C-9
R628	18K	4704-0183-032	C-9
R629	22K	4704-0223-032	B-9
R630	22K	4704-0223-032	C-8
R631	2.2K	4704-0222-032	C-7
R632	100 ohm, 2W, WW	4707-0101-031	D-9
R633	4.7K	4704-0472-032	B-10
R634	10K	4704-0103-032	D-8
R635	5.6K	4704-0562-032	A-10
R636	100 ohm	4704-0101-032	B-10
R637	22K	4704-0223-032	E-8
R638	18K	4704-0183-032	C-9
R639	1K	4704-0102-032	E-5
R640	22K	4704-0223-032	E-8

CAPACITORS

C600	1000 μ f, 16V	1513-3254-704	E-6
C601	220 μ f, 16V	1513-3254-711	B-9
C602	.1 μ f 20%, 12V	1502-0104-005	B-9
C603	.01 μ f 5%, Mylar	1508-0103-510	C-7
C604	10 μ f, 25V	1513-0100-003	B-7
C605	.0022 μ f 5%, Mylar	1508-0222-510	C-7
C606	not used		
C607	.0047 μ f 5%, Mylar	1508-0472-510	C-7

<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>ZONE</u>
C608	not used		
C609	.0022 μ f 5%, Mylar	1508-0222-510	C-6
C610	.22 μ f, Mylar	1508-3300-302	C-6
C611	1000 μ f, 16V	1513-3254-704	B-7
C612	150pf 20%, Z5F	1523-0151-002	B-6
C613	150pf 20%, Z5F	1523-0151-002	E-5
C614	150pf 20%, Z5F	1523-0151-002	D-5
C615	150pf 20%, Z5F	1523-0151-002	E-5
C616	4.7pf 10%, NPO	1500-0479-905	E-5
C617	variable 2.5-20	1517-0000-019	D-8
C618	22pf 5%, NPO	1538-0220-508	C-8
C619	68pf 5%, NPO	1538-0680-509	C-9
C620	100pf 5%, G.P.	1538-0101-524	C-8
C621	.01 μ f 25V, Y5R	1538-0103-804	C-8
C622	150pf 10%, Y5P	1538-0151-601	C-8
C623	.1 μ f 20%, 12V	1502-0104-005	C-8
C624	.001 μ f 50V, YZ	1503-0102-003	C-8
C625	.001 μ f 50V, YZ	1503-0102-003	C-7
C626	150pf 20%, Z5F	1523-0151-002	D-6
C627	.1 μ f 20%, 12V	1502-0104-005	D-8
C628	10 μ f, 25V	1513-0100-003	D-8
C629	47 μ f, 16V	1513-0470-002	C-9
C630	.2 μ f, 12V	1502-0204-006	D-10
C631	470pf 20%, Z5F	1523-0471-002	C-10
C632	470pf 20%, Z5F	1523-0471-002	C-10
C633	.47 μ f, 12V	1502-0474-006	B-8
C634	0.2 μ f, 12V	1523-0204-006	D-10

DIODES

CR600	10V Zener, 1N5240B	4808-0000-051	B-6
CR601	Germ 102-339	4807-1233-900	B-9
CR602	Germ 102-339	4807-1233-900	C-8
CR603	Germ 102-339	4807-1233-900	D-10
CR604	Germ 102-339	4807-1233-900	D-10

INDICATORS

LD600	RED L.E.D.	4810-1282-905	B-7
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INDUCTORS

L600	coil	1800-3152-009	E-5
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TRANSISTORS

Q600	Darlington D40C1	4814-0000-002	C-9
Q601	N.P.N. White SPS1539	4801-0000-060	E-7
Q602	N.P.N. SPS952-2	4801-0000-016	E-8
Q603	N.P.N. Red SPS1473	4801-0000-035	E-5
Q604	N.P.N. SPS952-2	4801-0000-016	B-10

<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>ZONE</u>
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INTEGRATED
CIRCUITS

IC600	Syn. Chip, MC145156	3130-6424-500	C-8
IC601	Prescaler	3130-6424-401	C-8
IC602	7414	3130-3157-654	C-10
IC603	Microprocessor	3130-6060-312	C-10
IC604	74LS02	3130-3157-632	B-8
IC605	μA741	3130-3167-907	C-7
IC606	μA741	3130-3167-907	C-6

CRYSTALS

Y600	12.8 MHz	2338-3300-502	D-9
Y601	3.579 MHz	2342-3284-400	C-10

THERMISTOR

RT600	KB23J1	5300-0000-001	C-9
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XLU1515B PARTS LIST

The XLU1515B Parts List is identical to the XLU1515A Parts List except for the following:

P.A. Board

R301	1K 10% comp	4700-0102-042
R302	not used	
C302	15pf 5% NPO	1500-0150-605
C311	not used	
C313	10pf 5% Mica	1522-0100-006
C314	not used	
C315	33pf Mica Undwd	1522-5418-304

Schematic Zone Locations are the same as those shown for the XLU1515A parts.

<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>
<u>CAPACITORS</u>		
C500	0.01uf 5% 100V Mylar	1508-0103-510
C501	150pf 20% 50V Z5F	1523-0151-002
C502	0.47uf +80-20, 12V (Option only)	1502-0474-006
C503	24pf 10% NPO 50V	1500-0240-650
C504	variable, 4-11pf, white	1517-3295-302
C505	0.01uf 30% Y5R 25V	1538-0103-804
C506	33pf 10% NPO 50V	1500-0330-650
C507	150pf 10% Y5P 50V	1538-0151-601
C508	0.01uf 5% 100V Mylar	1508-0103-510
C509	0.001uf 5% 100V Mylar	1508-0102-510
C510	0.0047uf 5% 100V Mylar	1508-0472-510
C511	150pf 20% 50V Z5F	1523-0151-002
C512	10uf 16V Electrolytic	1513-0100-002
C513	0.0047uf 5% 100V Mylar	1508-0472-510
C514	0.001uf 5% 100V Mylar	1508-0102-510
C515	0.2uf +80-20 12V BC-12	1502-0204-006
C516	0.0047uf 5% 100V Mylar	1508-0472-510
C517	0.068uf 10% 100V Mylar	1508-0683-610
C518	0.0047uf 5% 100V Mylar	1508-0472-510
C519	0.068uf 10% 100V Mylar	1508-0683-610
C520	150pf 10% Y5P 50V	1538-0151-601
C521	0.2uf +80-20 12V BC-12	1502-0204-006
C522	10uf 16V Electrolytic	1513-0100-002
C523	0.2uf +80-20 12V BC-12	1502-0204-006
C524	220uf 16V Electrolytic	1513-3254-711
C525	150pf 20% 50V Z5F	1523-0151-002
C526	47uf 16V Electrolytic	1513-0470-002
C527	0.1uf 20% 12V BC-12	1502-0104-005
C528	0.1uf 20% 12V BC-12	1502-0104-005
C529	100uf 16V Electrolytic	1513-0101-002
C530	47uf 16V Electrolytic	1513-0470-002
C531	0.1uf 20% 12V BC-12	1502-0104-005
C532	100uf 16V Electrolytic	1513-0101-002
C533	20pf 10% NPO 50V	1500-0200-650
C534	150pf 10% 50V Y5P	1538-0151-601
C535	47pf 5% NPO 50V	1524-0470-002
C536	0.001uf 20% Y5T 50V	1538-0102-703
C537	0.001uf 20% Y5T 50V	1538-0102-703
C538	0.2uf +80-20 12V BC-12	1502-0204-006
C539	150pf 20% 50V Z5F	1523-0151-002
C540	47pf 10% 500V NPO	1500-0470-605
C541	100pf Chip 10% 50V	1540-0101-601
C542	not used	
C543	1000uf 16V Electrolytic	1513-3254-717
<u>DIODES</u>		
CR500	silicon IN4148	4805-1241-200
CR501	Silicon Rect., 3 Amp	4806-0000-005
<u>INDUCTORS</u>		
L500	Coil, white	1800-3152-009
L501	Helical coil 6.5T	1800-5433-702

<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>
L502	Helical coil 6.5T	1800-5433-702
L503	Choke molded, 1½T, orange	1803-5125-907
L504	Choke Molded, 4½T, yellow	1803-5125-902

TRANSISTORS

Q500	Power, MRF 517	4804-3169-609
Q501	MPS A05	4801-0000-005
Q502	Red Top SPS1473	4801-0000-035
Q503	SPS-952-2	4801-0000-016

INTEGRATED CIRCUITS

IC500	LM 2902N	3130-3157-637
IC501	LM358N	3130-3167-909
IC502	8V Reg 78L08AC	3130-0000-021
IC503	5V Reg 78M05C	3130-0000-019

MISCELLANEOUS

R500	12V Relay	4500-3251-900
J500	Connector, 14 Pin	2105-3299-202

MAIN BOARD - SYNTHESIZER SECTION

RESISTORS (All resistors are 5% ¼W carbon film unless otherwise noted)

R600	10 ohms	4704-0100-032
R601	27 ohms comp 10%	4700-0270-042
R602	150 ohms	4704-0151-032
R603	12K	4704-0123-032
R604	18 ohms	4704-0180-032
R605	39 ohms	4704-0390-032
R606	39 ohms	4704-0390-032
R607	27K	4704-0273-032
R608	470 ohms	4704-0471-032
R609	27 ohms comp 10%	4700-0270-042
R610	not used	
R611	390 ohms	4704-0391-032
R612	1.2K	4704-0122-032
R613	2.7 ohms	4704-0279-032
R614	56K	4704-0563-032
R615	100K	4704-0104-032
R616	15K	4704-0153-032
R617	47K	4704-0473-032
R618	100K	4704-0104-032
R619	100K	4704-0104-032
R620	150K	4704-0154-032
R621	27K	4704-0273-032
R622	330 ohms	4704-0331-032
R623	22K	4704-0223-032
R624	22K	4704-0223-032
R625	27K	4704-0273-032

<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>
R626	4.7K	4704-0472-032
R627	8.2K	4704-0822-032
R628	18K	4704-0183-032
R629	2.2K	4704-0222-032
R630	22K	4704-0223-032
R631	2.2K	4704-0222-032
R632	100 ohms 2W Wirewound	4707-0101-031
R633	4.7K	4704-0472-032
R634	10K	4704-0103-032
R635	5.6K	4704-0562-032
R636	100 ohms	4704-0101-032
R637	22K	4704-0223-032
R638	18K	4704-0183-032
R639	1K	4704-0102-032

CAPACITORS

C600	1000uf 16V Electrolytic	1513-3254-704
C601	220uf 16V Electrolytic	1513-3254-711
C602	0.1uf 20% 12V BC-12	1502-0104-005
C603	0.01uf 5% 100V Mylar	1508-0103-510
C604	10uf 25V Electrolytic	1513-0100-003
C605	0.0022uf 5% 100V Mylar	1508-0222-510
C606	not used	
C607	0.0047uf 5% 100V Mylar	1508-0 2-510
C608	not used	
C609	0.0022uf 5% 100V Mylar	1508-0222-510
C610	0.22uf Mylar	1508-3300-302
C611	1000uf 16V Electrolytic	1513-3254-704
C612	150pf 20% 50V Z5F	1523-0151-002
C613	150pf 20% 50V Z5F	1523-0151-002
C614	150pf 20% 50V Z5F	1523-0151-002
C615	150pf 20% 50V Z5F	1523-0151-002
C616	4.7pf 10% 500V NPO	1500-0479-905
C617	variable, 2.5-20	1517-0000-019
C618	22pf 5% 50V NPO	1538-0220-508
C619	68pf 5% 50V NPO	1538-0680-509
C620	100pf 5% 50V GP	1538-0101-524
C621	0.01uf 30% 25V Y5R	1538-0103-804
C622	150pf 10% Y5P 50V	1538-0151-601
C623	0.1uf 20% 12V BC-12	1502-0104-005
C624	0.001uf +80-20 50V YZ	1503-0102-003
C625	0.001uf +80-20 50V YZ	1503-0102-003
C626	150pf 20% 50V Z5F	1523-0151-002
C627	0.1uf 20% 12V BC-12	1502-0104-005
C628	10uf 25V Electrolytic	1513-0100-003
C629	47uf 10V Electrolytic	1513-0470-001
C630	0.2uf +80-20 12V	1502-0204-006
C631	470pf 20% 50V Z5F	1523-0471-002
C632	470pf 20% 50V Z5F	1523-0471-002
C633	0.47uf +80-20 BC-12	1502-0474-006
C634	0.2uf +80-20 12V	1502-0204-006

THERMISTOR

RT600	Thermistor KB23J1	5300-0000-001
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<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>
<u>DIODES</u>		
CR600	10V Zener IN5240B	4808-0000-051
CR601	Germanium	4807-1233-900
CR602	Germanium	4807-1233-900
CR603	not used	
CR604 - 620	Germanium	4807-1233-900
LD600	Red L.E.D. (O.O.L.)	4810-1282-905
<u>INDUCTORS</u>		
L600	coil	1800-3152-009
<u>TRANSISTORS</u>		
Q600	Darlington D40C1	4814-0000-002
Q601	White Top - SPS1539	4801-0000-060
Q602	SPS-952-2	4801-0000-016
Q603	Red Top SPS1473	4801-0000-035
Q604	SPS-952-2	4801-0000-016
<u>INTEGRATED CIRCUITS</u>		
IC600	Synthesizer MC145156	3130-6424-500
IC601	Prescaler	3130-6424-401
IC602	7414	3130-3157-654
IC603	Microprocessor	3130-6060-312
IC604	74LS02	3130-3157-632
IC605	μA741	3130-3167-907
IC606	μA741	3130-3167-907
<u>CRYSTALS</u>		
Y600	12.8 MHz	2338-3300-502
Y601	3.579 MHz	2342-3284-400